What is claimed is:

1. A processing apparatus, comprising;

a plurality of processing chambers for processing substrates;

cassette mount tables for mounting cassettes storing a plurality of substrates to be processed or processed substrates;

a transfer device for transferring said substrates being capable of being controlled such that at least one of said substrates to be processed can be taken out of any location in said plurality of cassettes mounted on said plurality of cassette mount tables; and

control means (a) for transferring substrates to be processed from any location in said one of the cassettes mounted in the plurality of cassette mount tables to at least one of the processing chambers via said transfer device and (b) for transferring processed substrates in said processing chambers to the original locations of the original cassettes, in which the substrates are stored prior to processing, via said transfer device.

2. A processing apparatus, comprising;

a plurality of processing chambers for processing substrates;
cassette mount tables for mounting cassettes storing a plurality of substrates to be processed or processed substrates;

a transfer device for transferring said substrates being capable of being controlled such that at least one of said substrates to be processed can be taken

out of any location in said plurality of cassettes mounted on said plurality of cassette mount tables; and

control means (a) for transferring substrates to be processed one by one from any location in said one of the cassettes mounted in the plurality of cassette mount tables to at least one of the processing chambers via said transfer device and (b) for transferring processed substrates in said processing chambers to the original locations of the original cassettes one by one, in which the substrates are stored prior to processing, via said transfer device.

A processing apparatus, comprising;

a plurality of processing chambers for processing substrates;

a plurality of cassette mount tables for mounting at least one cassette storing at least one of substrates and at least one cassette storing at least one of dummy substrates;

a transfer device for transferring said substrates and said dummy substrates, being capable of being controlled such that any of said substrates and any of said dummy substrates can be taken out of any location in said cassettes mounted on said plurality of cassette mount tables; and

a control means (a) for transferring said substrates and said dummy substrates from any location in any of said cassettes mounted in said plurality of cassette mount tables to the processing chambers via said transfer device, and (b) for transferring said substrates and said dummy substrates in said processing

chambers to the original locations of the original cassettes, via said transfer device.

4. A processing apparatus, comprising;

a plurality of processing chambers for processing substrates;

a plurality of cassette mount tables for mounting at least one cassette storing at least one of substrates and at least one cassette storing at least one of dummy substrates;

a transfer device for transferring said substrates and said dummy substrates, being capable of being controlled such that any of said substrates and any of said dummy substrates can be taken out of any location in said cassettes mounted on said plurality of cassette mount tables; and

a control means (a) for transferring said substrates and said dummy substrates one by one from any location in any of said cassettes mounted in said plurality of cassette mount tables to the processing chambers via said transfer device, and (b) for transferring said substrates and said dummy substrates in said processing chambers to the original locations of the original cassettes one by one, via said transfer device.